41992
S/263/62/000/020/004/006
E194/E135

AUTHOR: Selyaninov, M.G.

TITLE: Measurement of instantaneous velocities of liquids with an electro-thermo-anemometer and by the electromagnetic induction method

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk, Izmeritel'naya tekhnika, no.20, 1962, 31, abstract 32.30.221. (In collection "Novyye metody izmereniy i pribory dlya gidravlich. issled." ('New methods of measurement and instruments for hydraulic investigations'), M., AN SSSR, 1961, 49-55)

TEXT: A thermo anemometer with constant hot film temperature is described. The sensitive element is connected in one arm of a measuring bridge and is heated by the output current of an amplifier to the input of which the out-of-balance voltage of the bridge is applied. A linear relationship is achieved between the velocity of flow of the liquid and the electrical output signal of the instrument by amplifying the out-of-balance voltage, which is proportional to the fourth root of the velocity, and applying it to

Card 1/2

the control grid of an electronic tube; the relationship between the tube anode current and the grid voltage is inverse to the bridge characteristic for the pick-up and temperature used in the instrument. A platinum film of 0.2 x 1 mm is deposited on the edge of a glass or quartz wedge-shaped probe with a wedge angle of 30°. The film probe is stronger and has a higher signal-to-noise ratio than a wire probe. The instrument readings are directly proportional to the mean rate of flow; the variable component of the signal is applied to the input of an r.m.s. analyser which can convert signals received from two amplifiers so that the longitudinal and transverse components of velocity can be measured with two probes installed in the flow in such a way that their working edges form different angles with the direction of flow. Measurement of pulsating velocities by the electromagnetic induction method is also considered. 5 figures. 7 references.

[Abstractor's note: Complete translation.]

SOV/120-59-2-33/50

AUTHORS: Vyazemskiy, V.O., Pisarevskiy, A.N., Selyaninov, Yu.Ye.

TITLE: Linear Pulse Gate Circuit (Skhema proportsional'nogo propuskaniya impul'sov)

PERIODICAL: Pribory i tekhnika eksperimenta, 1959, Nr 2, p 117 (USSR)

ABSTRACT: The arrangement described in Ref 1 uses special beam-deflection valves. The present circuit, Fig 1, contains only standard pentodes 6P 15 P. Until the arrival of the gate pulse at the grid of $Л_2$ the anode current of $Л_1$ flows through $Л_2$, $Л_4$ and R_a. If a signal should arrive at the grid of $Л_1$ the increase in anode current does not evoke a change in output voltage since the anode of $Л_2$ is effectively earthed via the capacitance of 0.25 μf. There is no direct transmission through the feedback path R_1, R_2, C_1 since the output resistance of the cathode follower $Л_5$, $Л_6$ is small. When a gate pulse is applied the anode current of $Л_1$ switches from $Л_2$ to $Л_3$. If at the same time a signal pulse arrives then $Л_1$ works as an anode follower. The circuit passes

Card 1/2

Linear Pulse Gate Circuit SOV/120-59-2-33/50

linearly single-polarity pulses of either sign, amplitudes up to 100 ohms and rise-times better than
Card 2/2 0.1 μs.
There is 1 figure and 1 English reference.

ASSOCIATION: Radiyevyy institut AN SSSR
(Radium Institute of the Ac. Sc. USSR)

SUBMITTED: June 23, 1958

S/120/60/000/01/015/051
E192/E382

AUTHORS: Pisarevskiy, A.N. and Selyaninov, Yu.Ye.

TITLE: A Non-overloading Amplifier with an Improved Rise Time

PERIODICAL: Pribory i tekhnika eksperimenta, 1960, Nr 1, p 63 (USSR)

ABSTRACT: A detailed circuit diagram of the amplifier is shown in Figure 1, p 63. The circuit is based on the amplifier described by V.O. Vyazemskiy et al (Ref 2). However, some modifications have been introduced so that both the "triples" were provided with conductive feedback which resulted in an improved overload characteristic of the device. A forming line or a suitable RC time constant can be connected into the anode of the fifth tube (see the figure) in order to obtain a quasi-equilibrium pulse. The amplifier employs tubes, types 6Zh9P and 6E5P, having a high figure of merit. It was therefore possible to obtain the following performance with the amplifier: rise time of 5×10^{-8} sec, gain of 10^3, overloading factor of 200, maximum output signal of 120 V and maximum

Cardl/2

S/120/60/000/01/015/051
E192/E382

A Non-overloading Amplifier with an Improved Rise Time

input signal of 20 V. The device is used in a scintillation spectrometer.[1] The authors thank V.O. Vyazemskiy for valuable advice.
There are 1 figure and 2 Soviet references.

ASSOCIATION: Radiyevyy institut AN SSSR (Radium Institute of the Ac.Sc., USSR)

SUBMITTED: December 3, 1958

Card 2/2

S/120/60/000/004/004/028
E192/E482

21.5200

AUTHORS: Pisarevskiy, A.N., Soshin, L.D., Selvanov [illegible]

TITLE: An Automatic Portable Single-Channel Scintillation Gamma-Spectrometer Based on Transistors

PERIODICAL: Pribory i tekhnika eksperimenta, 1960, No.4, pp.29-35

TEXT: A detailed description of the instrument, with detailed circuit diagrams and photographs, is given. The input pulses for the instrument are obtained from the output of a photo-electron multiplier. These negative pulses are applied to an emitter follower and then to a diode discriminator. The pulses at the output of the discriminator are limited at a suitable level, these pulses are then applied to the input of millivolt selectors of the lower and upper levels, which are connected as an anticoincidence circuit acting as a differential discriminator. The pulses from this discriminator are fed to a standard shaping circuit and then to a scale-estimating circuit (counter) which changes the effective capacitance of a registering or counting device. The signal from the scale-estimator circuit is applied to the registering counter which converts the discrete information into a continuous signal. The voltage from this circuit, which is proportional to the number

Card 1/4

S/120/60/000/004/004/028
E192/E482

An Automatic Portable Single Channel Scintillation Gamma Spectrometer Based on Transistors

of the registered pulses, is then applied to an automatic recording milliammeter. The instrument operates as follows: a suitable time delay is set by a timer. An initial discrimination level is set by means of bias circuits. The timer is then switched on and the information to be processed is fed in. After the termination of a pre-determined delay time, the timer produces a pulse which is applied to the automatic biasing circuit and a control circuit. The latter resets the memory circuits. The automatic biasing circuit changes the level of the discriminator to a new value. In order to select a suitable scale for the instrument and a suitable delay time, the instrument is provided with an intensimeter (Ref. 1). The discriminator of the instrument consists of diode limiters and millivolt selectors of the lower and upper levels (based on transistors) and an anticoincidence circuit (based on transistors). The scale-estimating circuit consists of 7 identical binary cells which are based on transistors. The registering device is based on the system analogous to that

Card 2/4

87365

S/120/60/000/004/004/028
E192/E482

An Automatic Portable Single-Channel Scintillation Gamma-Spectrometer Based on Transistors

described by O.T.Sumbayev (Ref.4). It consists of 2 identical binary counters (memory and registering counters) which are connected "in opposition" and contain "AND" circuits between the individual cells. The timer is based on dekatrons and uses a stabilized frequency of 10 kc/s as the standard timing waveform. The automatic biasing circuit for the discriminator is based on binary dividers and consists of 8 cells. The pick-up head of the instrument employs a photomultiplier, type ФЭУ-13 (FEU-13), whose output pulses have an amplitude of 10 V. It is therefore possible to use these pulses without amplification. With a supply voltage of 1880 V it is possible to obtain signals with an amplitude of 10 to 12 V for the γ-line of 660 keV for Cs^{137} (with a crystal of NaI(Tl)). The instrument is capable of determining 128 points of the investigated spectrum, the width of the discriminator level being 0.1 V, which corresponds to the amplitude range of 0.1 to 12.7 V. The time delay can be 4, 20, 60, 120, 300 and 600 sec. The stability of the instrument during 3 to 4 hours

Card 3/4

87365
S/120/60/000/004/004/028
E192/E482

An Automatic Portable Single-Channel Scintillation Gamma-Spectrometer Based on Transistors

of continuous operation is better than 2% and the resolution for a γ-line of Cs^{137} is about 10%. The authors express their gratitude to Yu.A.Nemilov and V.O.Vyazemskiy for valuable advice and for discussing the results. There are 14 figures and 6 references: 4 Soviet and 2 non-Soviet.

ASSOCIATION: Radiyevyy institut AN SSSR
(Radium Institute AS USSR)

SUBMITTED: May 28, 1959

Card 4/4

VYAZEMSKIY, V.O.; PISAREVSKIY, A.N.; SELYANINOV, Yu.Ye.

Single-channel differential discriminator for coincidence circuits with scintillation counters. Prib. i tekh.eksp. 6 no.4:64-66 Jl-Ag '61. (MIRA 14:9)

1. Radiyevyy institut AN SSSR.
(Electronic circuits)
(Electronic instruments)

PISAREVSKIY, A.N.; SELYANINOV, Yu.Ye.

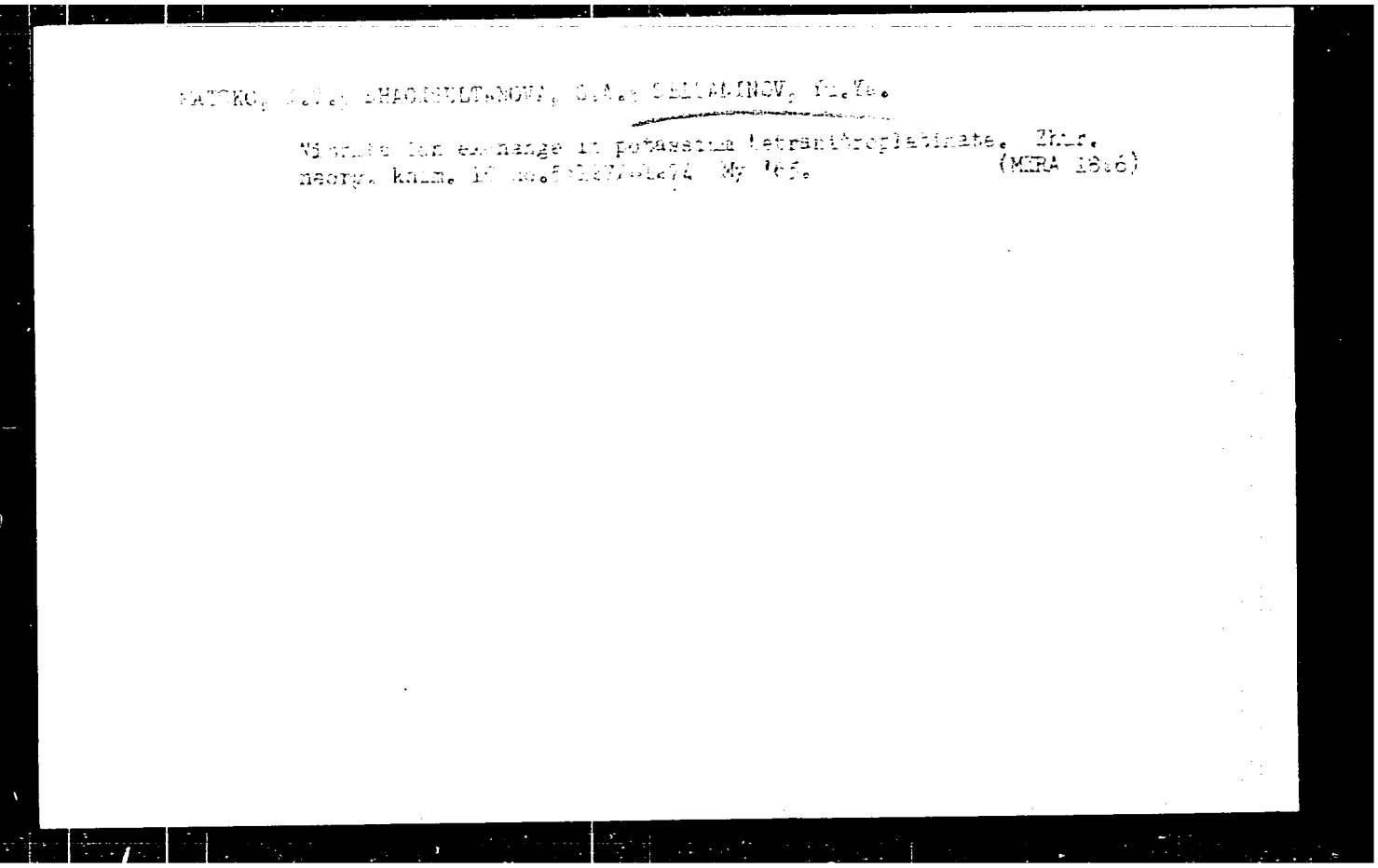
Nonoverloading amplifier with the formation of a bipolar pulse. Prib. i tekh.eksp. 6 no.4:156-157 Jl-Ag '61. (MIRA 14:9)

1. Radiyevyy institut AN SSSR.
(Amplifiers (Electronics))

SELYANINOV, Yu.Ye.; KHOMICH, K.V.

Simple method for improving the high vacuum in MI-1305 mass spectrometers. Prib. i tekh. eksp. 9 no.2:174-175 Mr-Ap'64. (MIRA 17:5)

1. Belorusskiy gosudarstvennyy universitet.



GUTKEVICH, S.G.; LEBEDEV, O.V.; SELYANINOVA, N.S.

Easy gluing of NaJ(Tl) single crystals. Prib. i tekh. eksp. 6 no.1:198-199 Ja-F '61. (MIRA 14:9)

1. Institut radiatsionnoy gigiyeny.
(Gluing)

L 6866-65 EWT(m)/EPF(c)/EPR/EWP(j)/T/EWP(q)/EWP(b) Pc-4/Pr-4/Ps-4 IJP(c)/
AFWL/ESD(t)/RAEM(t) RM/WW/JD

ACCESSION NR: AR4044269 S/0272/64/000/006/0160/0161

SOURCE: Ref. zh. Metrologiya i izmeritel'naya tekhnika. Otdel'ny*y vy*pusk, Abs. 6.32.1133

AUTHOR: Gutkevich, S. G.; Lebedev, O. V.; Pisarevskiy, A. N.; Selyaninova, N. S.; Shamov, V. P.

TITLE: New methods for the packing of scintillators

CITED SOURCE: Sb. Stsintillyatory* i stsintillyats. materialy*. Khar'kov, Khar'kovsk. un-t, 1963, 236-238

TOPIC TAGS: scintillator, single crystal, stilbene, tolane/OK-50 glue

TRANSLATION: There is described a method of packing of single crystals with the help of glue OK-50. The method ensures transparent, colorless, and very durable gluing of scintillators NaI(Tl), CsI(Tl), KI(Tl), stilbene, tolane, and plastic crystals with glass, improves their resolving power, and makes it

Card 1/2

L 6160-65
ACCESSION NR: AR4044269

possible to prepare very thin films of scintillators and to use for packing thin-walled containers which cannot be taken apart. The method is recommended for introduction into industrial production.

SUB CODE: OP, SS ENCL: 00

Card 2/2

POTAPOV, L.N.; MIKHAYLOV, V.P.; SELYANKIN, I.T.; LOZOVSKIY, V.I.

Using professor Chinekel's shield in Baley Metallurgical Combine mines. Biul. TSIIN tsvet. met. no. 21:2-6 '57. (MIRA 11:7)
(Baley--Mining engineering)

SELYANKINA, K.P., mladshiy nauchnyy sotrudnik

Material for the hygienic standardization of the vanadium content of water in reservoirs. Gig. i san. 26 no.10:6-12 O '61. (MIRA 15:5)

1. Sverdlovskiy institut gigiyeny truda i profpatologii.
(VANADIUM--ANALYSIS) (WATER--POLLUTION)

GLAZACHEVA, L.I.; SELYANKINA, V.V.; KURGANOVA, N.M.; GRIGOROVICH, S.I.; POPOVA, L.A.; GRIGOR'YEVA, F.P.; EYPRE, T.F.; VAYTSMAN, A.I., red.; BRAYNINA, M.I., tekhn. red.

[Hydrological yearbook] Gidrologicheskii ezhegodnik. Leningrad, Gidrometeor. izd-vo. 1957. Vol.1. [Basin of the Baltic Sea] Bassein moria. Nos.4-6. [Basin of the Western Dvina River and basins of rivers extending west and south of it as far as the state frontier] Bassein r.Zapadnoi Dviny i basseiny rek k zapadu i iugu do gosudarstvennoi granitsy. Pod red. L.I.Glazachevoi. 1961. 388 p. (MIRA 14:9)
(Baltic Sea region--Hydrology) (Kama Valley--Hydrology)

KLIMENKO, A.P.; SEL'YANOVA, G.N.

Solubility of carbon dioxide in liquefied hydrocarbons. Trudy Inst.isp.gaza AN USSR 9:10-12 '61. (MIRA 15:9)
(Liquefied gases) (Carbon dioxide)

RABKINA, A.L.; KUZ'MIN, V.I.; SEL'YANOVA, G.N.

Conference on the production of ethylene and propylene. Neftekhimiia 1 no.5:721-723 S-O '61. (MIRA 15:2)
(Ethylene--Congresses)(Propene--Congresses)

SEL'YANOVA, G.N.

Using porous glass for chromatographic separation of hydrocarbons. Nefteper. i neftekhim. no.7:42-47 '65.
(MIRA 18:12)

1. Institut neftekhimicheskogo sinteza AN SSSR.

SEL'YANOVA, G.N.; SOKOLOV, V.A.

Separation of hydrocarbon gases by diffusion through porous materials. Neftekhimiia 2 no.3:393-404 My-Je '62. (MIRA 15:8)

1. Institut neftekhimicheskogo sinteza AN SSSR.
(Hydrocarbons) (Diffusion)

SELYANSKAYA, A. I.

"Polarographic Determination of Cobalt in the Presence of Nickel. Catalytic Evolution of Hydrogen in the Presence of Complex Compounds of Cobalt with Dimethylglioxym." Stromberg, A. G. and Selianskaja, A. I. (p. 303)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1945, Volume 15, no. 4-5.

SELYANSKAYA, R.K., inzh.

Once more on rights of factory inspectors controlling boiler units. Bezop. truda v prom. 1 no.12:17 D '57. (MIRA 12:3)

1.Ryazanskiy stankostroitel'nyy zavod.
(Boiler inspection)

SELYANSKIY, A.P.

137-58-5-9291

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 72 (USSR)

AUTHORS: Mikulinskiy, A.S., Yefremkin, V.V., Selyanskiy, A.P. Serebrennikova, M.A.

TITLE: Loading of a Calcium Carbide Bearing Charge Into a Hot Furnace (Zagruzka shikhty, soderzhashchey karbid kaltsiya, v goryachuyu pech')

PERIODICAL: Tr. Ural'skogo n.-i. khim. in-ta, 1957, Nr 4, pp 200-202

ABSTRACT: In order to achieve conditions conducive to safety in the loading of a charge containing CaC_2 into a hot furnace, a number of experiments was conducted at temperatures ranging from 950°C to 1150° on a pilot-plant furnace with a charge containing NaCl and CaC_2. Pure NaCl, thoroughly heated for 1-1.5 hrs at a temperature of 500-600°, was employed during the experiments together with waste products of high-purity CaC_2 (particle size 0.2 mm) containing about 65% CaC_2. The charge was subjected to briquetting under a pressure of 30 kg/cm^2. The furnace in which the experiments were conducted consisted of a cylindrical housing with an internal lining of fireclay brick. A Fe retort vessel 140 mm in diameter was placed into the furnace. It was

Card 1/2

137-58-5-9291

Loading of a Calcium Carbide Bearing Charge Into a Hot Furnace

established that a backfire occurred 2-5 minutes after an entire charge weighing approximately 4 kg had been introduced in one batch into the furnace which was inclined at an angle of 25°; a portion of the charge would occasionally be ejected from the furnace. When a small portion of the charge (particularly if the charge had not been briquetted) was placed into the furnace, flames formed over it and subsequent charging proceeded without backfire. Therefore, in order to eliminate the hazard connected with the loading of charges containing CaC_2 into a hot furnace, it is imperative that only a small portion be introduced into the furnace initially, followed by the rest of the charge in small batches only after an open flame has appeared.

G.S.

1. Electric furnaces--Operation 2. Transformers--Operation

Card 2/2

SOV/137-58-9-18756

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 9, p 86 (USSR)

AUTHORS: Mikulinskiy, A.S., Selyanskiy, A.P.

TITLE: Continuous and Semicontinuous Vacuum Furnaces for Light-metals Extraction (Vakuumnyye pechi polunepreryvnogo ili nepreryvnogo deystviya dlya polucheniya legkikh metallov)

PERIODICAL: Tr. Ural'skogo n.-i. khim. in-ta, 1957 (1958), Nr 5, pp 39-55

ABSTRACT: A description is offered of experimental vacuum furnaces for the recovery of small quantities of light metals ($\leq$ 1 kg). The furnaces work batch-wise or continuously and have graphite crucibles. Heating is by transmitting a current through the charge and an electrode or by burning a fuel. Experiments in the recovery of K, Na, and Mg and in the distillation and rectification of the metals obtained, for the purpose of cleaning them, are described. Special attention is given to equipment design for the purpose of maintaining the vacuum during the production process.

Card 1/1 1. Vacuum furnaces--Design 2. Vacuum furnaces--Equipment 3. Vacuum furnaces--Operation 4. Metals-Processing Ya.K.

Selyanskiy, A.P.

PHASE I BOOK EXPLOITATION SOV/4548

Akademiya nauk SSSR. Komissiya po fiziko-khimicheskim osnovam proizvodstva stali

Primeneniye vakuuma v metallurgii (Use of Vacuum in Metallurgy) Moscow, Izd-vo AN SSSR, 1960. 334 p. Errata slip inserted. 4,500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut metallurgii imeni A.A. Baykova. Komissiya po fiziko-khimicheskim osnovam proizvodstva stali.

Resp. Ed.: A.M. Samarin, Corresponding Member, Academy of Sciences USSR; Ed. of Publishing House: G.M. Makovskiy; Tech. Ed.: S.G. Markovich.

PURPOSE: This collection of articles is intended for technical personnel interested in recent studies and developments of vacuum steelmaking practice and equipment.

COVERAGE: The book contains information on steel melting in vacuum induction furnaces, and vacuum arc furnaces, reduction processes in vacuum, and degassing of steel and alloys. The functioning of apparatus and equipment, especially vacuum furnaces and vacuum booster pumps is also analyzed. Personalities are mentioned in connection with some of the articles and will appear in the Table of Contents. Three articles have been translated from English. Some of the

AVAILABLE: Library of Congress

14

S/080/60/033/009/005/021
A003/A001

AUTHORS: Mikulinskiy, A.S., Selyanskiy, A.P.

TITLE: The Study of the Possibility of Increasing the Degree of Reducing Agent Consumption in the Silicothermal Method of Potassium Production

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol. 33, No. 9, pp. 1981-1985

TEXT: Experiments were conducted to find the optimum ratio of reducing agent to potassium chloride in the silicothermal production of potassium. A special furnace was developed for determining the reaction rate. The weight increase in the metal obtained was used as indicator of the reaction rate. The reaction $4KCl+Si+4CaO=2CaCl_2+2CaO\cdot SiO_2+4K$ was studied by Gus'kov, Voynitskiy and Zuyev (Ref. 2). Chemically pure potassium chloride, commercial lime with 97% CaO and 75%-ferromanganese were used. The temperature was kept at 900-1,000°C. It was shown that the reduction of the molar ratio ferrosilicon : potassium chloride in the charge permits the specific consumption of 75-% ferrosilicon to be decreased to 0.5-0.8 kg/kg potassium. At the same time the specific consumption of salt somewhat increases. For determining the optimum composition

S/080/60/033/009/005/021
A003/A001

The Study of the Possibility of Increasing the Degree of Reducing Agent Consumption in the Silicothermal Method of Potassium Production

of the charge it is necessary to make allowance for local prices of raw material and electric energy. Under any conditions the molar ratio of Si:KCl is within the range of 0.3-0.5 and the weight ratio of 75%-ferrosilicon to potassium chloride within 0.15-0.25. There are 2 tables, 1 figure and 2 Soviet references.

SUBMITTED: February 13, 1960

Card 2/2

L 52056-65 EWT(m)/EWP(t)/EWP(b) IJP(c) JD/JG

ACCESSION NR: AR5008963 S/0137/65/000/001/G020/G020

SOURCE: Ref. zh. Metallurgiya, Abs. 1G118

AUTHOR: Mikulinskiy, A. S.; Kosarev, V. A.; Yumanova, L. V.; Sipeyko, I. Ye.; Selyanskiy, A. P.; Panfilov, S. A.; Poluboyartsev, A. G.

TITLE: Semi-industrial furnace for the extraction of alkaline metals by the thermal vacuum method

CITED SOURCE: Elektrotermiya. Nauchno-tekhn. sb., vyp. 37, 1964, 28-30

TOPIC TAGS: metallurgy, alkali metal, potassium

TRANSLATION: The article describes the design and testing results of a semi-industrial rotary vacuum furnace. The device has internal and external heaters for heating the charge, which permits an increase in the productivity of the furnace. The unit also has built-in devices for loading materials and unloading reaction residues, which provides semi-continuous operation of the furnace. The working volume of the furnace is 15 m^3, the volume of working space of the retort is 1.8 m^3. The design developed provides conditions for extraction of metallic potassium by the carbide thermal method.

Card 1/1

SELYANSKIY, V.M., kandidat biologicheskikh nauk; SMIRNOVA, V.Ya., kandidat sel'skokhozyaystvennykh nauk; VOSKOBOYNIKOV, G.N., veterinarnyy vrach.

Pulmonary diseases of lambs and their therapy. Veterinariia 30 no.3:41-43 Mr '53. (MLRA 6:3)

1. Vsesoyuznyaa stantsiya zhivotnovodstva, g. Tutayev, Yaroslavskoy oblasti.

Q

USSR / Farm Animals. General Problems.

Abs Jour : Ref Zhur - Biologiya, No 5, 1959, No. 21186

Author : Selyanskiy, V. M.
Inst : Not given
Title : The Adaptation of Animals to Factors of Nutrition

Orig Pub : Zhivotnovodstvo, 1958, No 3, 44-48

Abstract : As in the first series of experiments, soybean oil cakes were gradually added to the fodder of calves and the quantity of common salt was increased, the calves became used to the ration without suffering indigestion. At the age of 6 months, they ate up to 1.5 kg of soybean oil cakes and 90 g of common salt per 100 kg of their live weight (4 - 5 times more than norms). In the 1st group weight gains were larger than in the 2nd group which was given 10 g of common salt per 100 kg of live weight.

Card 1/2

5

BABIY, L.T., kand. sel'khoz. nauk; STOLLYAR, T.A., kand. sel'khoz. nauk; ASANOV, P.M., assistent; SELYANSKIY, V.M., kand. sel'-khoz. nauk; LOBIN, N.V., kand. sel'khoz. nauk; KOVIN'KO, D.A., kand. biol. nauk; MASLIYEVA, O.I., kand. sel'khoz. nauk; PETROV, V.M., kand. veter. nauk; ANAN'YEV, P.K., kand. veter. nauk; PENIONZHKEVICH, E.E., doktor biol. nauk, prof.; SERGEYEVA, A.M., kand. sel'khoz. nauk; BALANINA, O.V., kand. sel'khoz. nauk; GRIGOR'YEV, G.K., st. nauchnyy sotr.; KRIKUN, A.A., Geroy Sotsialisticheskogo Truda, kand. sel'khoz. nauk; YAROVOY, P.F., kand. veter. nauk; BELOKOBYLENKO, V.T., na-uchnyy sotr.; GROMOV, A.M., kand. sel'khoz. nauk; MOSIYASH, S., red.; NAGIBIN, P., tekhn. red.

[Handbook for poultrymen] Kniga ptitsevoda. Alma-Ata, Kaz-sel'khozgiz, 1962. 354 p. (MIRA 16:5)
(Kazakhstan--Poultry)

S/123/62/000/003/002/018
A004/A101

AUTHOR: Selyantsev, G. M.

TITLE: Investigations of the contact strength of steel

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 3, 1962, 21, abstract 3A120 ("Izv. Irkutskogo s.-kh. in-ta", 1960, no. 16, 86-92)

TEXT: The author describes the design of a mechanical pulsator for investigating the contact strength and contact fatigue. In the pulsator, a rotating specimen with spherical face end hits the ground face of a movable specimen (the speed of rotation of the shaft with the rotating specimen is 420 rpm). Grade 45 steel was found to show the greatest resistance to this kind of wear. An analysis of the microhardness of the hole surface shows that grade 45 steel, in spite of its HB 187 high hardness, is highly workhardened, increasing its microhardness in comparison with the steel grades 20 and У 8 (U8).

V. Kolesnik

[Abstracter's note: Complete translation]

Card 1/1

L 05803-67 EWP(c)/EWP(k)/EWT(d)/EWT(m)/EWP(w)/EWP(v)/EWP(t)/EWP(l)/ETI

ACC NR: AT6016340 (A) SOURCE CODE: UR/3183/65/000/001/0033/0038
IJP(c) JD

AUTHOR: Prikhod'ko, L. S. (Engineer); Selyunin, V. M. (Engineer)

ORG: None

TITLE: A mobile laboratory for studying working conditions and wear of automobile assemblies

SOURCE: Kharkov. Avtomobil'nodorozhnyy institut. Avtomobil'nyy transport; mezhvedomstvennyy respublikanskiy nauchno-tekhnicheskiy sbornik, no. 1, 1965, 33-38

TOPIC TAGS: testing laboratory, wear resistance, automotive industry, radioactivity measurement

ABSTRACT: The authors discuss a mobile laboratory developed by the Kharkov Automobile Highway Institute for studying the effect of road conditions on the operational indices of straight and articulated trucks. The GAZ-51 truck and LZK trailer were used to house this unit. The unit has two functions: 1. to determine the parameters of automobile assembly working conditions by mathematical statistics; 2. determine assembly and parts wear by the radioisotope method. Electric pulse transducers are used for registering information of assembly working conditions and the signals are recorded by an oscillograph. Parts wear is determined by registering the level of radiation in the oil given off by the wear particles of irradiated parts. Diagrams are

Card 1/2

L 05903-67

ACC NR: AT6016340

given for the various components. The average test run for the mobile laboratory is 1500 km. The results from such runs show that all equipment is reliable and enough data are obtained to warrant statistic processing. Orig. art. has: 3 figures.

SUB CODE: 13/05 SUBM DATE: None/ ORIG REF: 002

kh

Card 2/2

SELYATITSKAYA, N.I.

Activity of inventors in the sugar industry. Sakh. prom. 37 no.8:54-55 Ag '63. (MIRA 16:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gosudarstvennoy patentnoy ekspertizy.
(Sugar industry--Technological innovations)

1. SELYATITSKIY, G.A., SHAVELKINA, S.I.

2. USSR (600)

4. Coal-Kuznetsk Basin

7. Geological structure and reserves of the openpit mine section of the Novo-Sergeevskiy coal deposits in the Kuznetsk Basin. (Abstract) Izv. Glav. upr. geol. gon. no. 2: 1947

9. Monthly List of Russian Accessions, Library of Congress, March 1953. Unclassified.

A

Cleaning of surfaces of apparatus with sand. B. B. Bal'tser, V. A. Selyatitskii, and A. F. Sheludchenko. *Sakharnaya Prom.* 24, No. 1, 32-3(1950).—A description is given of an installation which permits cleaning of the surfaces of filter-press plates, heating surfaces, etc., with sand, and compressed air. V. E. Baikow

Automatic distributer of milk of lime for the primary defecation. V. A. Selyatitskiĭ. *Sakharnaya Prom.* 24, No. 7, 34–7(1950).—The distribution is activated by incoming diffusion juice, which raises the level of a float, which in its turn raises a sepg. knife. This admits a certain amt. of milk of lime into the overflow box for the diffusion juice. When the level of the diffusion juice is low, the float closes the sepg. knife and the milk of lime circulates through other channels.

V. E. Baikow

SELYATITSKIY, V. A.

Sugar Industry

Processin sugar beet root ends. Sakh. prom. 26 no. 9, 1952

Monthly List of Russian Accessions, Library of Congress, December 1952. UNCLASSIFIED.

AUTHOR: Belyatitskiy, V., Engineer 29-58-5-16/26

TITLE: The History of a Lump of Sugar (Istoriya kusochka sakhara)

PERIODICAL: Tekhnika Molodezhi, 1958, Nr 5, pp 24 - 27 (USSR)

ABSTRACT: Sugar is the most valuable food. It is richer in calories than bread and even than meat. The sugar beet is used as raw material for the production of sugar. The sugar content of this root plant is not always the same and depends on the weather conditions as well as on the care. On favorable conditions its sugar content is 17 - 20%. One single sugar refinery works up 180 - 200 t in the course of 24 hours and about 1o.ooo railcars a season. Then the author described the course of sugar, starting from loading the sugar beet to the drying of the finished product s crystallized beet sugar. Sugarlumps are produced from crystallized beet sugar in other refineries by refining it by recrystallization and then pressing it. There is 1 figure.

Card 1/1 1. Sucrose--Sources 2. Sucrose--Production 3. Sugar beets--Processing

SELYATITSKIY, V.A.

I-IV diffuser. Sakh.prom. no.4:14-15 Ap '60. (MIRA 13:8)

1. Gosplan RSFSR.
(Ol'khovatka (Voronezh Province)--Diffusers)
(Ol'khovatka (Voronezh Province)--Sugar machinery)

KOVALENOK, A.K.; DEMCHINSKIY, N.A.; SELYATITSKIY, V.A.

Certain problems in the re-equipment of the sugar industry of the R.S.F.S.R. Sakh. prom. 35 no.2:6-10 F '61. (MIRA 14:3)

1. Vserossiyskiy Sovet Narodnogo Khozyaystva.
(Sugar industry—Equipment and supplies)

GERASIMOV, S.I.; SELYATITSKIY, V.A.

Hungarian "J" diffusion apparatus. Sakh.prom. 35 no.6:64-71 Je '61.
(MIRA 14:6)

1. Gosplan RSFSR (for Gerasimov). 2. Vserossiyskiy Sovet Narodnogo Khozyaystva (for Selyatitskiy).
(Hungary--Sugar machinery)

SELYATITSKIY, V.A.

Rotary diffusers. Sakh. prom. 37 no.8:19-20 Ag '63. (MIRA 16:8)

1. Sovet narodnogo khozyaystva RSFSR.
(Diffusers)

SELYATITSKIY, V.A.

Machinery spare part supply bases for the sugar industry. Sakh. prom. 37 no.11:13 N '63. (MIRA 16:11)

1. Sovet narodnogo khozyaystva RSFSR.

[illegible], Izrail' [illegible]ovich; [illegible], [illegible], inzh., retsenzent; KIR[illegible], [illegible], red.

[Mixing cascade condenser] Kaskadnye kondensatory smesheniia. Moskva, Izd-vo Pishchevaia promyshl., 1964. [illegible] p. (MIRA 17:6)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001547730010-3"

SELYAVIN, G. F.

AUTHORS: Pol'skiy, N.I. (Pol's'kyy), and Selyavin, G.F. (H.F.) 21-6-6/22

TITLE: Reliability of Power Systems with an Emergency Reserve (Nadezhnost' v energosistemakh s avariynym rezervom)

PERIODICAL: Dopovidi Akademii Nauk Ukrains'koi RSR, 1957, No 6, pp 558-561 (USSR)

ABSTRACT: To calculate the emergency reserve in power systems, it is of great importance to have some reliability criteria for them. Such criteria are usually the reliability of system operation and the amount of deficiency in supplying electric power during an emergency case. The existing methods of estimating the reliability of power systems are based on some statements of the probability theory. All known publications in this field have failed to take into consideration the possibility of a breakdown of the reserve units which replaced the damaged ones. Therefore, the results obtained in many cases are not satisfactory. The paper furnishes rigorous recurrent formulas for determination of the reliability of power system operation and the amount of energy supply in case of emergency.
There are 3 Slavic references.

Card 1/2

Reliability of Power Systems with an Emergency Reserve 21-6-6/22

ASSOCIATION: Institute of Thermal Power Engineering of the AN Ukrainian SSR (Instytut teploenerhetyky AN URSR)

PRESENTED: By I.T. Shvets (Shvets'), Member of the AN Ukrainian SSR

SUBMITTED: 15 February 1957

Card 2/2

SELYAVIN, G.F., Cand Tech Sci -- (diss) "Use of ~~TPP~~ electric power stations of sugar ~~plants~~ refineries for the electric supply of rural regions of the Ukrainian SSR." Kiev, 1958, 16 pp with graphs (Min of Higher Education UkSSR. Kiev Order of Lenin Polytechnic Inst) 100 copies (KL, 26-58, 107)

RAB[illegible], M.I.; SELYAVIN, G.F.

Increasing heat efficiency in gas plants using producers under pressure. Gaz. prom. no.7:14-15 Jl '58. (MIRA 11:7)
(Gas manufacture and works)

SELYAVIN, G.F. [Seliavin, H.F.], naukoviy pratsivnik

Profitableness of electric hotbed heating. Mekh. sil'. hosp. 9 no.2:6-7 F '58. (MIRA 11:3)

1.Institut teploenergetiki AN URSR.
(Hotbeds) (Greenhouses--Heating and ventilation)

SELYAVIN, G.F.

Determining the power of thermal electric power plants of sugar refineries with consideration of power given to rural consumers. Trudy Inst. tepl. AN URSR no.15:9-24 '58. (MIRA 11:10)
(Sugar manufacture) (Rural electrification)

SELYAVIN, G.F.

Power reserve and reliability of power production by rural power systems including the thermal electric power plants of sugar refineries. Trudy Inst. tepl. AN URSR no.15:25-33 '58. (MIRA 11:10)
(Rural electrification) (Sugar manufacture)

SHVETS, Ivan Trofimovich; DYBAN, Yevgeniy Pavlovich. Prinimali uchastiye: SELYAVIN, G.F., kand.tekhn.nauk; MOTOVILOVETS, I.A., kand.fiziko-matemat.nauk. ORLIK, Ye.L., red.; KHOKHANOVSKAYA, T.I., tekhn.red.

[Air cooling of gas turbine runners] Vozdushnoe okhlazhdenie rotorov gazovykh turbin. Kiev, Izd-vo Kievskogo univ., 1959. 349 p. (MIRA 12:7)

(Gas turbines--Cooling)

67815

~~24(6)~~ 10,4000 SOV/143-60-1-12/21

AUTHORS: Shvets, I.T., Academician of the AS UkrSSR; Dyban, Ye.P., Selyavin, G.F., Stradomskiy, M.V., Candidates of Technical Sciences

TITLE: Experimental Determination of the Coefficients of Hydraulic Resistance for Apertures in Revolving Discs

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy: Energetika, 1960, Nr 1, pp 89 - 99 (USSR)

ABSTRACT: This is a description of a series of experiments carried out on special apparatus (Figure 1) in the Thermal Power Engineering Institute AS UkrSSR to determine the influence of rotation on the hydraulic resistance of separate parts of the cooling system in gas turbine rotors. A series of formulae is used to determine coefficients; the consumption coefficient, i.e. the ratio of the actual gas rate through the aperture G to the rate with isoentropic flow G_0, is expressed by

Card 1/5

Experimental Determination of the Coefficients of Hydraulic Resistance for Apertures in Revolving Discs

$$\mu = \frac{G}{G_o} \qquad (1)$$

The cylindrical apertures used in the first series of experiments had sharp inlet and outlet edges, constant length of 24.15 mm and the following diameters: 4; 5.3; 6.5; 8; 10; 11.5; 13.3; 14.3; 20 and 25 mm, which corresponds to a change in the relative depth l/d from 6.04 to 0.96 and embraces the whole potential range of aperture sizes for supplying cooling air in gas turbines. The formulae for determining the coefficient of inlet and outlet resistance are

Card 2/5

Experimental Determination of the Coefficients of Hydraulic Resistance for Apertures in Revolving Discs

$$\rho = \frac{1}{\rho_o}\left(1+0.32K_o+0.89K_o^2+0.037K_o^3+0.17K_o^4-0.043K_o^5+0.025K_o^6\right) \quad (12)$$

and

$$\rho = \frac{1}{\rho_o}\left(1+0.6K+0.081K^2-0.0024K^3+0.000016K^4\right) \quad (12a)$$

The parameter K characterizes change in the conditions governing the flow of the current through apertures in the disc during rotation:

$$K = tg\varphi = \frac{u}{c} \quad (6)$$

Card 3/5 where u is the peripheral speed on the axis of the

Experimental Determination of the Coefficients of Hydraulic Resistance for Apertures in Revolving Discs

apertures; c - mean outlet speed in the aperture.

$$K_o = \mu \cdot K \qquad (10)$$

The authors conclude that, when the ratio of the speed of rotation to the mean outlet speed in the aperture is large (u/c = 2.5 app.), the consumption coefficient for apertures with sharp inlet edges diminishes by about 6 times. When the ratio u/c is above 4 the influence of the shape of the inlet edges may be disregarded. Rounding off the outlet edges has no practical effect on conditions governing air flow through the apertures in rotating discs. The consumption coefficient for square apertures is near that for cylindrical channels (given similar hydraulic radii). The relative depth of the aperture, if the ratio is between

Card 4/5

Experimental Determination of the Coefficients of Hydraulic Resistance for Apertures in Revolving Discs

$0.96 < \frac{1}{d} < 6.04$, has no practical effect on the relationship of the consumption coefficient to rotation. With the aid of experimental data the authors established the empirical relationships of the consumption and hydraulic resistance coefficients to K and K_0 parameters. These are true for a disc rotating in a housing where the relative axial clearance between the disc and the housing is greater than 1.5. Much detailed information on the experiments is included. A correction slip at the end of the volume states that the readings along the axis of the ordinates in Figure 5 should be 0.2; 0.3; 0.4; 0.5; 0.6; 0.7. There are 5 graphs, 1 diagram, 1 set of a graph and a diagram and 2 Soviet references.

ASSOCIATION: Institut teploenergetiki AN USSR (Thermal Power Engineering Institute AS UkrSSR)

SUBMITTED: September 4, 1959

Card 5/5

10 2000 2615 2115 only
11.9200

S 021/60/000/002/006/010
A133/A029

AUTHORS: Shvets', I.T.; Academician of the AS UkrSSR, Dyban, Ye P., Selyavin, G.F.; Stradoms'kyy, M.V.; Rudkin, S.K.; Mel'nyk, V.P.

TITLE: Influence of Initial Disturbances on the Development of Turbulent Stream Conditions When Air Moves Through Tubes

PERIODICAL: Dopovidi Akademiyi nauk Ukrayins'koyi Radyans'koyi Sotsialistychnoyi Respubliky, 1960, No. 2, pp. 173 - 176

TEXT: This paper presents the results of experiments studying the nature of velocity pulsations in a tube with various rates of artificially-created turbulences of the air stream and their effect on the hydraulic resistance. The following conclusions were drawn: allowances should be made for the initial turbulences of stream when calculating heat transfer and hydraulic resistance for a fluid moving through relatively short tubes. Effects of artificial turbulences are particularly great at the transition stage. Initial disturbances die away within relatively short length of tubes, these lengths being dependent on the magnitude of initial turbulence and the Reynolds number. Initial disturbances do effect the value of the coefficient of hydraulic resistance within the range

Card 1/2

Influence of Initial Disturbances on the Development of Turbulent Stream Conditions When Air Moves Through Tubes

of Reynolds numbers from 2,000 - 5,000; at higher values thereof their effect on the stream passing through a tube (having a length of 80 diameters) is within the limits of the measurement error. The experimental stand included a 4,000 mm long round tube having a 51 mm inner diameter. Initial disturbances were created with the help of perforated disks of of 3 - 5 and 10 mm in diameter, installed in the intake tube section. Pulsations were measured and recorded by an ЭТА-5А (ETA-5A) electric thermoanemometer, at Reynolds numbers from 700 to 10,000. Figure 1 shows oscillograms giving the dependence of velocity pulsations in the intake area on the Reynolds numbers (disk with 3 mm perforations, coefficient of clogging $\beta = 0.18$). Figure 2 gives the range of critical Reynolds numbers, Figure 3 shows the dependence of the relative axial pulsation on the coefficient of clogging. Figure 4 shows how the average relative velocity pulsations change along the length of a tube with a 10 mm perforated disk. There are 4 figures.

ASSOCIATION: Instytut teploenergetyky AN UkrRSR (Institute of Heat Power Engineering of the AS UkrSSR)

SUBMITTED: October 1, 1959

Card 2/2

S/196/62/000/010/026/035
E194/E155

AUTHORS: Shvets', I.T., Diban, Ye.P., Stradoms'kiy, M.V., and Selyavin, G.F.

TITLE: Determination of flow factors of rotating ducts

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.10, 1962, 17, abstract 10 G126. (Zb. prats' In-t teploenerg. AN URSR, no.18, 1960, 16-27). (Ukr., with summary in Russian)

TEXT: Results are given of an experimental study of the flow factor and hydraulic resistance of rotating ducts. When gas flows through rotating ducts the flow factor and resistance depend very much on the ratio of the peripheral speed at the centre of the duct to the mean flow rate of gas in the duct. Empirical formulae are given to determine these factors. The results could be used in the design of disc cooling systems for gas turbines and in calculation of the axial thrust in impulse turbines.
7 references.

[Abstractor's note: Complete translation.]

Card 1/1

SHVETS, I.T. [Shvets', I.T.]; DYBAN, Ye.P. [Dyban, IE.P.]; SELYAVIN, G.F. [Seliavin, H.F.]; STRADOMSKIY, M.V. [Stradoms'kyi, M.V.]; RUDKIN, S.K.; MEL'NIK, V.P. [Mel'nyk, V.P.]

Effect of initial disturbances on the development of turbulent flow of air through pipes. Zbir. prats' Inst. tepl. AN URSR no. 20:3-15 '60. (MIRA 14:4)

(Pipe—Fluid dynamics)

83237

S/143/60/000/008/004/00?
A189/A029

10.2000

AUTHORS: Shvets, I. T., Academician of the AS UkrSSR; Dyban, Ye. P.; Selyavin, G. F.; Stradomskiy, M. V.; Candidates of Technical Sciences

TITLE: Experimental Investigation of the Influence of Initial Perturbations Upon the Development of the Turbulent-Flow Condition

PERIODICAL: Energetika, 1960, Vol. 3, No. 8, pp. 102-109.

TEXT: The paper presents the results of the investigation, carried out in 1958-1959, on the influence of initial perturbations upon the development of axial velocity pulsations in an isothermic flow and on their influence upon the value of the hydraulic resistance coefficient in short tubes. The tests were carried out in a drawn tube, 50 mm in diameter, 80 diameters long, linked through a system of dampers to a compressed air main. The axial velocity pulsations were measured by the ЭТА 5А (ETA-5A) apparatus designed by the VEI im. V. I. Lenina (All-Union Institute of Power Engineering imeni V. I. Lenin). The tests indicated that the level of initial perturbances influences the development intensity of the

Card 1/2

83237

S/143/60/000/008/004/005
A189/A029

Experimental Investigation of the Influence of Initial Perturbations Upon the Development of the Turbulent-Flow Condition

turbulent flow. The higher the initial level in tubes shorter than 80 diameters, the sooner the laminar flow ends and the hydrodynamic stabilization of the flow ensues. A substantial influence of the level of initial perturbances upon the value of the hydraulic resistance coefficient was found for Reynolds numbers from 1,800 to 5,000. This influence was within the measurement errors for higher Reynolds numbers in tubes longer than 80 diameters. There are 3 sets of oscillograms, 3 graphs and 2 Soviet references.

ASSOCIATION: Kiyevskiy universitet imeni T. G. Shevchenko Institut teplo-energetiki AN UkrSSR (Kiyev University imeni T. G. Shevchenko Insitute of Heat Engineering of the AS UkrSSR)

SUBMITTED: March 18, 1960

Card 2/2

MARKOVSKIY, F.T. [Markov'kyi, P.T.]; SELYAVIN, G.F. [Seliavin, H.F.]

Effect of errors made in the balancing tests of boilers on the accuracy of the plotting of characteristics concerning increments. Zbir.prats' Inst.tepl.AN URSR no.23:3-13 '61. (MIRA 15:2)

(Boilers--Testing)

MARKOVSKIY, F.T. [Markovs'kyi, P.T.]; SELYAVIN, G.F. [Seliavin, H.F.]

Steadiness of the energy characteristics of boiler units.
Zbir.prats' Inst.tepl.AN URSR no.23:13-22 '61. (MIRA 15:2)
(Boilers)

SELYAVIN, G.F., kand.tekhn.nauk (Kiyev)

Methodology for taking into account the performance of electric power systems during their design. Elektrichestvo no.3:82-84 Mr '62. (MIRA 15:2)

(Electric power distribution)

SELYAVIN, G. [Seliavin, H.], kand.tekhn.nauk

Constellation of terrestrial suns. Nauka i zhyttia 11 no.1.14-16 Ja '62. (MIRA 15:2)

1. Uchenyy sekretar' Instituta teploenergetiki AN USSR.
(Electric power production)

MARKOVSKIY, F.T., kand.tekhn.nauk; SELYAVIN, G.F., kand.tekhn.nauk

Consideration of the characteristics of boiler units in the distribution of active loads between electric power plants. Energ. i elektrotekh. prom. no.3:65-69 Jl-S '63. (MIRA 16:10)

1. Institut teploenergetiki AN UkrSSR.

GERASHCHENKO, Oleg Arkad'yevich; FEDOROV, Vladimir Gavrilovich; SELYAVIN, G.F., kand.tekhn.nauk, otv.red.; SYTNIK, N.K., red.

[Technique of the heat-engineering experiment] Tekhnika teplotekhnicheskogo eksperimenta. Kiev, Izd-vo "Naukova dumka," 1964. 161 p. (MIRA 17:7)

MARKOVSKIY, F.T.; SELYAVIN, G.F.; KHATAYEVICH, R.M.

Conditions of electric power consumption in the power system of the Ukraine. Energ. i elektrotekh. prom. no.3:50-54 Jl-S '62. (MIRA 18:11)

1. Institut teploenergetiki AN UkrSSR.

SHVETS, I.T., akademik; DYBAN, Ye.P., kand.tekhn.nauk; SELYAVIN, G.F., kand. tekhn.nauk; STRADOMSKIY, M.Y., kand.

Experimental study of the effect of initail perturbations on the development of turbulent flow. Izv.vys. ucheb. zav.; energ. 3 no.8: 102-109 Ag '60. (MIRA 13:9)

1. Kiyevskiy universitet imeni T.G. Shevchenko i Institut teploenergetiki AN USSR. 2. Akademiya nauk USSR (for Shvets).
(Fluid dynamics)

SELYAVO, A.L.

Testing cylindrical compression springs for relaxation. Zav.lab. 26 no.2:203-205 '60. (MIRA 13:5)
(Springs (Mechanism)--Testing)
(Strains and stresses)

SELYAVO, A.L.; LIVSHITS, B.G.; EL'BURIKH, G.S.

Instruments for testing the compression of springs during heating.
Zav.lab. 27 no.1:95-97 '61. (MIRA 14:3)

1. Vsesoyuznyy institut aviatsionnykh materialov.
(Springs(Mechanism)--Testing)

S/129/61/000/011/007/010
E073/E335

AUTHORS: Selyavo, A.L., Engineer, Popova, N.M., Candidate of Technical Sciences, Zaslavskaya, L.V. and Solov'yeva, G.G., Engineers

TITLE: Coiled springs made of the steel 3X13 (3Kh13)

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov, no. 11, 1961, 36 - 40

TEXT: The investigations were made to obtain more accurate information on the heat-treatment of this steel. Rolled rods of steel 3Kh13 (0.26 - 0.31% C and 12.05 - 13% Cr) were subjected to mechanical and physical tests. Phase composition and structural transformations were determined by differential carbide analysis, described in earlier work of the authors and their team (Ref. 5 - "Zavodskaya laboratoriya", 1953, no. 7) and by X-ray structural analysis (carried out by G.M. Rovenskiy (deceased)), metallographic and electron-microscopic analyses. Relaxation tests were made on springs (D_{av} = 20 and 22 mm, d = 2 mm, t = 8 and 6 mm, H = 53 mm, n = 10 and 8) which were fixed into a rigid jig and held at the test temperatures. Due to

Card 1/3

Coiled springs ....

the rigidity of the holding device, the total deformation during the tests remained constant. The relaxation tests of the springs were carried out with initial stresses below the limit of proportionality of the material and at stresses which slightly exceeded the limit of proportionality. The experiments yielded the following results: 1) it was established that strengthening of this steel during tempering in the temperature range 300 - 500 °C is associated with the decomposition of the α-phase and rejection of disperse particles of the carbide $(Fe, Cr)_3C$ in the form of plates of a thickness below 10^{-5} mm. Rejection of the chromium carbide $(Cr, Fe)_7C_3$ during tempering (at 470 °C and higher) only supplements the process of dispersion-hardening and strengthening of the steel. 2) The temper brittleness of this steel at 475 - 550 °C is attributed to the rejection of the disperse chromium carbides $(Cr, Fe)_7C_3$. 3) It was established that the tempering temperature that ensured maximum relaxation stability of the steel 3Kh13 depends on the temperature of the relaxation tests; on increasing the test temperature from

L 15629-66 EWT(m)/EWA(d)/T/EWP(t)/EWP(z)/EWP(b) MJW/JD

ACC NR: AP6003312 (A) SOURCE CODE: UR/0129/66/000/001/0057/0060

AUTHOR: Selyavo, A. L.; Lashko, N. F.; Rulina, Z. M. 33 B

ORG: none

TITLE: Effect of phase composition on the relaxation resistance of 1Kh12N2VMF martensitic steel

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 1, 1966, 57-60

TOPIC TAGS: stress relaxation, martensitic steel, phase composition, carbide phase, tempering

ABSTRACT: The strength of coiled springs operating under conditions of stress relaxation, when the resistance to small plastic deformations is extremely high, is chiefly determined by the thermal stability of the structure of the solid solution and by the distribution, form and degree of dispersity of the carbide phases. Hence work parts operating under conditions of stress relaxation must be subjected to prior stabilizing heat treatment at temperatures above the working temperature. The relaxation resistance of martensitic steels containing 11-13% Cr such as the Soviet-developed 1Kh12N2VMF (EI961) steel (0.10-0.16% C, 10.5-12.0% Cr, 1.5-1.8% Ni, 1.60-2.00% W, 0.35-0.50% Mo, 0.18-0.30% V, 0.6% Si, 0.6% Mn, 0.025% S, 0.030% P) may be increased by additionally treating them with stronger carbide-forming elements (W and

Card 1/3 UDC: 620.181:669.14.018.45

L 15699-66

ACC NR: AP6003312

0

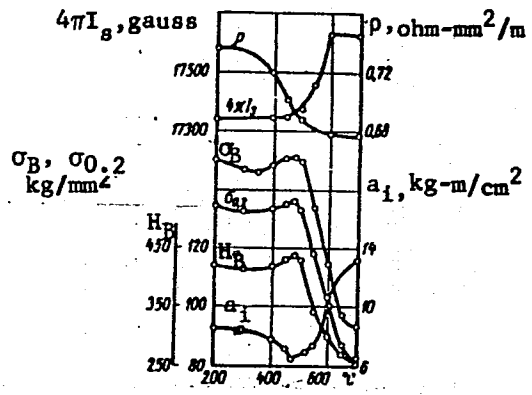


Fig. 1. Variation in physico-mechanical properties of 1Kh12N2VMF steel as a function of tempering temperature

Card 2/3

L 156 -66

ACC NR: AP6003312 0

Mo) and reducing their C content. 1Kh12N2VMF steel is used to fabricate various work parts (disks, blades, etc.) operating at temperatures of up to 600°C. The heat treatment of this steel consists in oil quenching from 1000-1020°C and tempering at 200-600°C. The pattern of variation of the mechanical (tensile strength σ_B, yield strength $\sigma_{0.2}$, impact strength a_i, Brinell hardness H_B) and physical (electric resistance ρ, magnetic saturation $4\pi I_s$)properties as a function of tempering temperature is shown in Fig. 1. This steel is characterized by the formation of the metastable high-disperse phase M_2C (a chromium-rich carbide with hexagonal structure) at 400-600°C. The lines on the radiogram of this phase are much more blurred than those of the other carbides, which indicates a high degree of dispersity of its particles. Additional tempering at 400°C for 100 and 500 hr causes the amount of the phase M_2C to increase from 0.82% to 1.20-1.35% by weight of the alloy. It is this phase that is responsible for the secondary hardness of 1Kh12N2VMF alloy. Fig. 1). Relaxation tests of specimen-springs (d = 2 mm, D = 20 mm, H = 53 mm, t = 8 mm, $n_{operating}$ = 6), performed by the method described by A. L. Selyavo (Zavodskaya laboratoriya, 1960, no. 2) showed that the highest relaxation resistance of this steel at 300 and 350°C is observed following tempering at 450 and 500°C. Such tempering assures the segregation of the hardening disperse particles of the carbide M_2C while at the same time only minimally depleting the solid solution with respect to alloy elements. Thus, 1Kh12N2VMF steel displays a high relaxation resistance at temperatures of up to 350°C. Orig. art. has: 2 figures, 3 tables.

SUB CODE: 11, 13, 20/ SUBM DATE: none/ ORIG REF: 003/ OTH REF: 002

Card 3/3 SMW

SELYAVO, V. G.

USSR/Engineering
Boilers

Mar/Apr 48

"Deaeration Column of the Barnaul Boiler Factory," V. G. Selyavo, Engr, Barnaul Boiler Works, 2½ pp

"Kotloturbostroy" No 2

Describes construction of a mixing type deaeration column. Gives characteristics of contemporary deaeration columns and diagrams to support data.

SELYAVO, V.[illegible]; BREGMAN, Ya.M.

Standardization of pipeline equipment. Vest.mash. 33 no.7:91-93 Jl '53. (MLRA 6:8)
(Pipe lines)

SELYAVO, V. G.

USSR/ Engineering

Card : 1/1

Authors : Selyavo, V. G., Engineer

Title : About the coefficient of the reduction in strength of a curved tube when it is bent at right angles to its curvature.

Periodical : Vest. Mash. 34/5, 16 - 18, May 1954

Abstract : Detailed mathematical computations of the effect on the reduction of strength of a curved tube when it is bent perpendicularly to the plane of its curvature are given. The author finds that in such bending the magnitude of the bending moment is reduced proportionally to a coefficient:

$$k = \frac{1 - 12\lambda^2}{10 - 12\lambda^2}$$

as compared to that calculated in accordance with the theory of bending. One German, two English and three Russian references, latest 1950.

Institution : ....

Submitted : ....

Selyavo, V. G.

USSR/ Miscellaneous

Card 1/1 Pub. 128 - 20/33

Authors : Selyavo, V. G.

Title : Letter to the Editor

Periodical : Vest. mash. 36/1, page 58, Jan 1956

Abstract : The author of the letter requests that two corrections be entered to A. I. Gurevich's article, "Normal Stresses Occuring in Bending Space Tubing," published in part in No. 5, of this publication for 1954, under the title, "About the Coefficient of Lower Rigidity of a Bent Pipe during Space Bending."

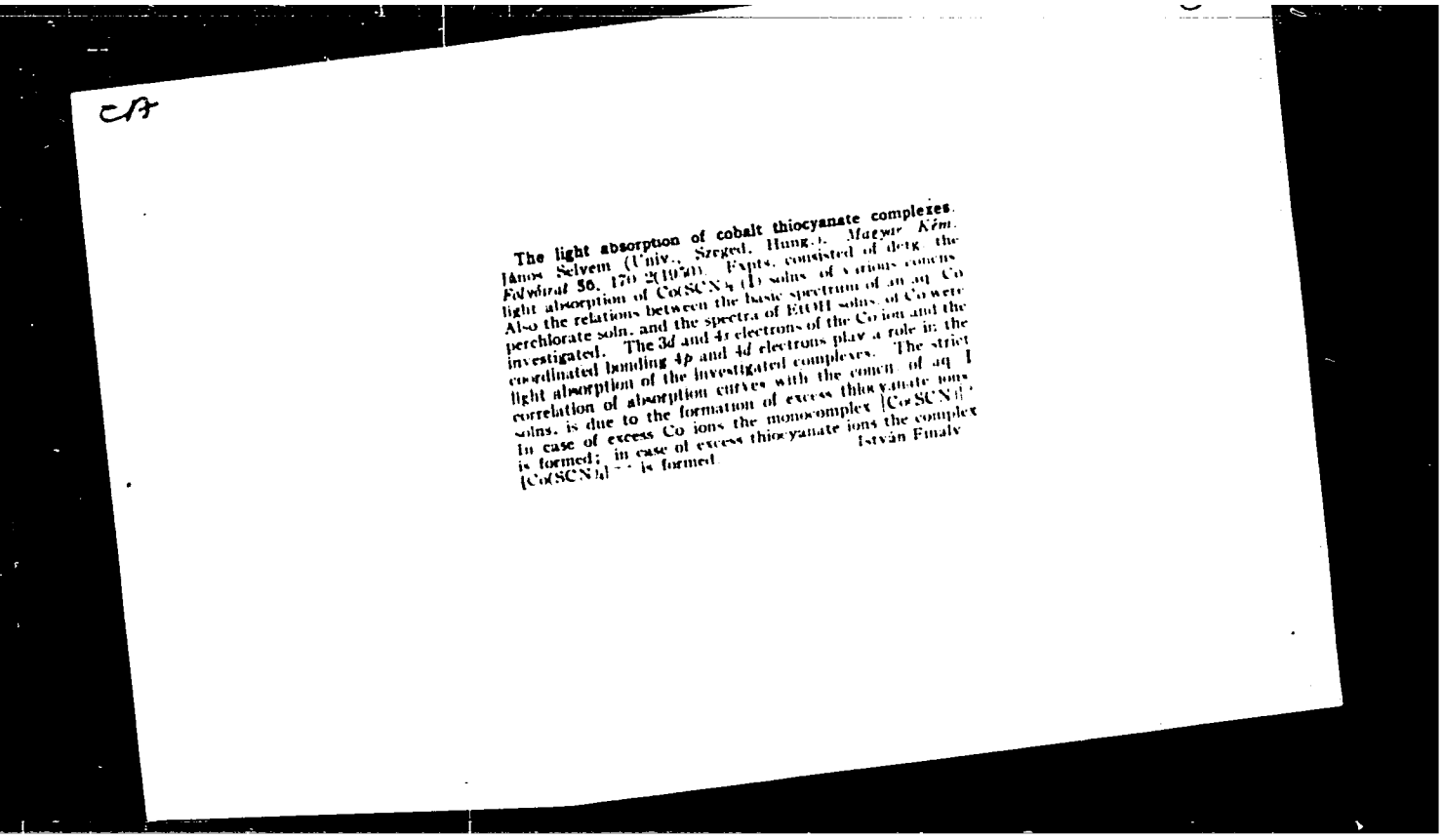
Institution : .....

Submitted : .....

CA

3

The light absorption of cobalt thiocyanate solutions I. Selyem (Univ., Szeged, Hung.). *Acta Univ. Szeged., Chem. et Phys.* 3, 59-62(1950)(in German). The light absorption of purified $Co(SCN)_2$ in abs. EtOH was studied by means of a König-Martens photometer in the visible spectrum, with and without the addn. of KSCN. The results are presented in graphs, showing the curves for the compd. $Co(SCN)_2$. The periodic fluctuations in the extinction values of the solns. are explained by polymerization.
István Finály



C/7

The light absorption of cobalt thiocyanate complexes. János Selyem (Univ., Szeged, Hung.). *Magyar Kém. Folyóirat* 56, 170-2(1950). Expts. consisted of detg. the light absorption of $Co(SCN)_2$ (I) solns. of various concns. Also the relations between the basic spectrum of an aq. Co perchlorate soln. and the spectra of EtOH solns. of Co were investigated. The 3*d* and 4*s* electrons of the Co ion and the coordinated bonding 4*p* and 4*d* electrons play a role in the light absorption of the investigated complexes. The strict correlation of absorption curves with the concn. of aq. I solns. is due to the formation of excess thiocyanate ions. In case of excess Co ions the monocomplex $[CoSCN]^+$ is formed; in case of excess thiocyanate ions the complex $[Co(SCN)_4]^{--}$ is formed. István Finaly

SELYE , J.

"Cathodic Protection of Reservoirs", P. 19[illegible], (MAGYAR [illegible] LAPJA, Vol. 9, No. 6, June 19[illegible], Budapest, Hungary)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. [illegible], No. 1, Jan. 19[illegible], Uncl.

S[illegible], J.

"Pal Selenyi (1[illegible]-1954): an Obituary", P. 1[illegible]2, (MAGYAR [illegible] LAPJA, Vol. [illegible], No. [illegible], June 1954, Budapest, Hungary)

SO: Monthly List of East European Accessions, (EEAL, LC, Vol. 4, No. 1, Jan. 19[illegible], Uncl.

23599
S/120/61/000/004/008/034
E202/E592

21.6000

AUTHORS: Vyazemskiy, V.O., Pisarevskiy, A.N. and Selyaninov, Yu.Ye.

TITLE: Single channel differential discriminator for the coincidence circuits of the scintillation counters

PERIODICAL: Pribory i tekhnika eksperimenta, no.4, 1961, 64-66

TEXT: The authors have designed and tested a single channel differential discriminator for work with fast coincidences circuits employing slow scintillators. In order to eliminate the effect of the build-up time of the investigated pulse on the resolution time of the coincidence circuit, a saturated amplifier has been used as described earlier by G.P. Mel'nikov (Ref.1: PTE, 1959, No.5, 61). In this arrangement the investigated impulse is fed simultaneously to the input of the expander and to the saturated amplifier. The latter is stable under overload conditions. The signal emerging from the saturated amplifier triggers the Schmidt trigger circuit which in turn sends an impulse via the cathode follower into the delay and pulse shaping lines, where it is shaped into a short pulse corresponding to the leading edge of the saturated pulse. The

Card 1/[illegible]

Single channel differential ... S/120/61/000/004/008/034
E202/E592

length of the delay is chosen to match the scintillation time of the phosphors. A detailed circuit is given in Fig.1, which shows the main circuit of the discriminator. (Correction: change the anode loads of the R.H.S. of valves 6 and 7 to 2.2 kohms, and the grid resistance of the L.H.S. to 100 kohms) (вход - input, выход - output, внешнее смещение - external bias, 11шт - 11 off [Abstractor's note: meaning 11 resistors in series.] With the working parameters given, the threshold of the discriminator may vary from 5 - 105 V; the width of the window is adjustable in 1 V steps from 1 - 10 V, and then to 14, 16, and 20 V. The threshold value and the window width were found to remain stable to within 1%, after 8 - 10 hours of work. The dead time of the instrument (for a given case) was approximately 3μsec. The duration of the output pulses measured at half peak, were estimated as 0.1 μsec, and their amplitude was 5 V (for both polarities). When the amplitude of the investigated pulses increased from 5 to 125 V, the time spread of the centroids of the output pulses was less than 5×10^{-8} sec. There are 1 figure and 5 references: 2 Soviet and 3 non-Soviet. The English-language references read as follows: Ref.3: W. Gruhle,

Card 2/4

29599

Single channel differential ... S/120/61/000/004/008/034
E202/E592

Nucl. Instrum., 1959, 4, 112; Ref.4: R. I. A. Levesque, W.F. Hornyak, Proc. of the Internat. Symp. on Nucl. Electronics, Paris, 1958, 287.

ASSOCIATION: Radiyevyy institut AN SSSR
(Radium Institute AS USSR)

SUBMITTED: July 15, 1960

Card 3/4

VANDOR, F.;SELYMES, Z.

Radium therapy of carcinoma in the pre-epiglottic vallecula. Magy. radiol. 4 no. 1:32-38 Feb 1952. (CLML 22:4)

1. Doctors. 2. Oncological Department (Head -- Prof. Dr. Pal Kisfaludy) of Metropolitan Uzsoki-utcai Hospital (Director -- Head Physician Dr. Istvan Halasz) and Nose, Throat, and Ear Clinic (Director -- Prof. Dr. Gyula Varga) of Budapest Medical University.

KASSAY, D.; SELYMES, Z.

Bronchoscopy in tuberculous bronchial lymph node perforation. Magy. sebeszet 5 no. 4:301-307 Nov. 1952. (CLML 24:1)

1. Bronchial, Ear, Nose, and Throat Department, First Surgical Clinic (Director -- Prof. Dr. Gyula Sebesteny), Budapest Medical University.

JUHASZ, Jeno; NAGY, Ferenc; SELYMES, Zoltan

A case of non-chromaffin paraganglioma of the orbit. Szemeszet 98 no.4:237-242 D '61.

1. A Budapesti Orvostudomanyi Egyetem I Korbonctani es Kiserleti Rakkutato Intezetenek (Igazgato: Balo Jozsef egyetemi tanar), II Szemeszeti Klinikajanak (Igazgato: Nonay Tibor egyetemi tanar) es II Sebeszeti Klinikajanak (Megb. vezeto: Stefanics Janos egyet. docens) kozlemenye.

(ORBIT neopl) (PARAGANGLIOMA case reports)

MARTON, Kalman, dr.; SELYMES, Zoltan, dr.

Tonsillary mycoses. (Clinical and histological study). Orv. hetil. 105 no.33:1557-1561 16 Ag '64.

1. Budapesti Orvostudomanyi Egyetem, Bor- es Nemikortani Klinika (igazgato: Foldvari Ferenc dr.) es II. Sebeszeti Klinika (igazgato: Rubanyi Pal dr.).